

Headquarters U. S. Air Force

Integrity - Service - Excellence



DExA for Test & Evaluation Update



U.S. AIR FORCE

**Major Lori Smailes
Air Force C2 & ISR Center**



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Quote of the Day

Excellence doesn't happen without dedication and hard work or without always taking the time and effort to cross the "t's" and dot the "i's." I always try and remember my father's advice:

Prior Preparation Prevents Poor Performance.

-- James A. Baker, III



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Why we are here!

BEETLE BAILEY



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Overview

- **Introductions**
- **TPOC Goals**
- **What is happening in the DExA?**
- **Test Process Overview**
 - **JITF Integration Testing**
 - **JITC Interoperability Testing**
 - **Information Security Certification**
 - **Training Certification**
 - **Beta II Testing**
- **DoDIIS T&E FY03 Funding**
- **Summary**



DExA for T&E Personnel

Captain Diane Martin

- OIC, DoDIIS Test and Evaluation

TSgt Janice Demarais

- NCOIC, DoDIIS Test and Evaluation

Mr. Regis Klepec, BAE Systems

- Test Coordination & Document Management

Contact Information:

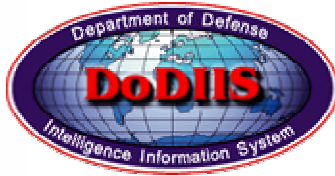
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TPOC Goals

- **Provide a Forum for Test Agencies, PMOs, Software Development Community, and IMA users**
- **Facilitate Community Feedback on Testing Issues**
- **Inform Community of Changes to T&E Policies**
- **Ensure all parties have a clear understanding of the certification process and the roles of the test organizations**



DExA's Current Activities

- **Smooth transition to Langley AFB VA**
 - 497th IOG transitioned from Bolling AFB DC to AFC2ISRC/INY to Langley AFB VA
- **Managing the Test Process**
- **Working on Documentation Updates**
 - DoDIIS Instructions
 - DoDIIS TEMP
- **Working on Funding Issues**
- **Joint Test Planning Meetings (JTPMs)**
- **Providing Test Guidance**



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Test Process Overview

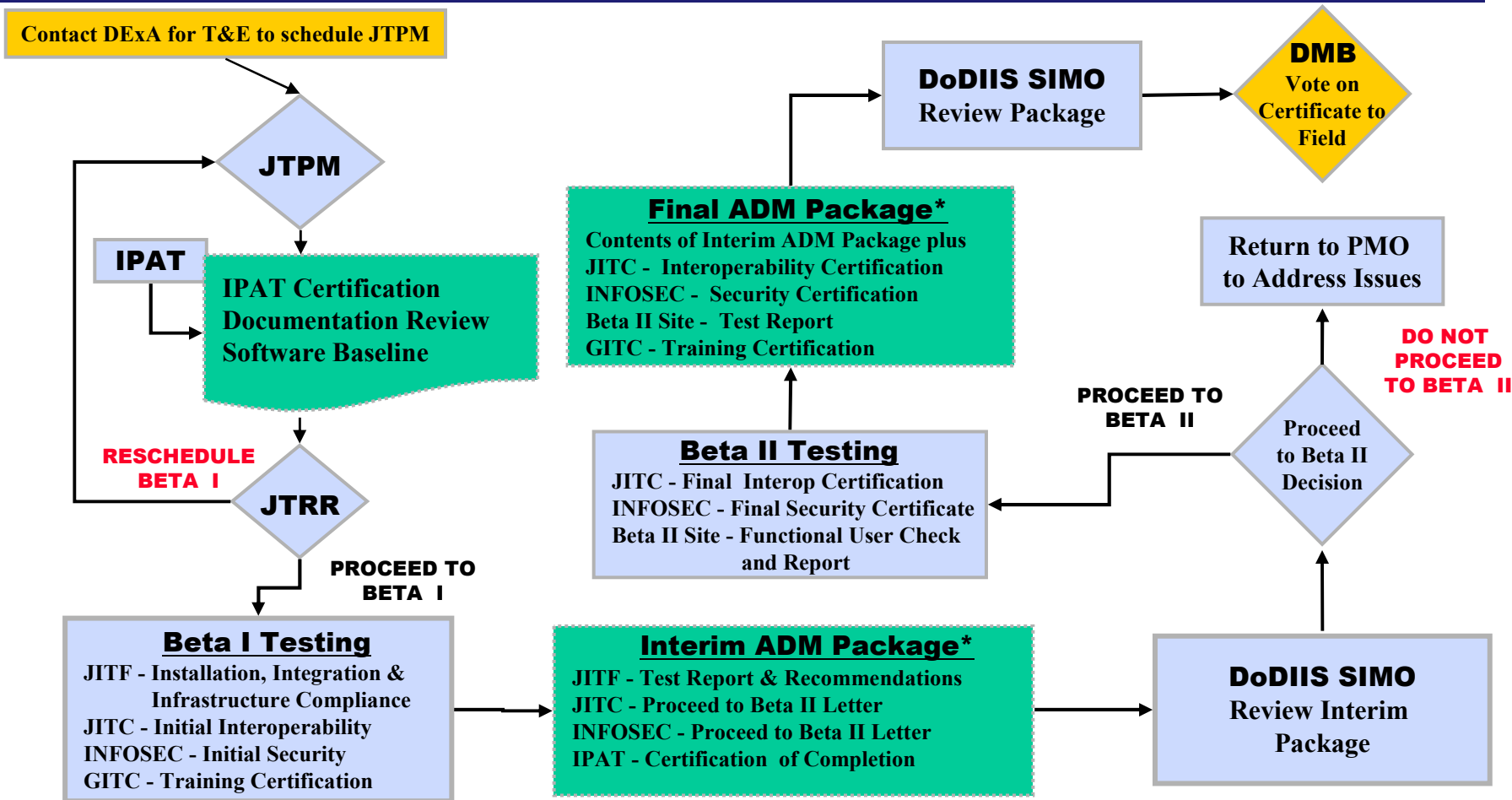
- **DoDIIS Testing 101**
 - **Integration**
 - **Interoperability**
 - **Security Certification**
 - **Training Certification**
 - **Operational**
- **DoDIIS T&E Process Flow Chart**
- **Beta I Testing**
- **Beta II Testing**



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DoDIIS Test and Evaluation Process



*See DoDIIS Instructions, Appendix C



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Test 101: Integration

■ **Purpose**

- **Verify installation procedures and infrastructure compliance, identify computer and network resource conflicts and the operational impact of a common environment.**

■ **Test Agency**

- **Joint Integration Test Facility (JITF), Rome NY**
- **NIMA Integration Test Facility (ITF), Newington VA**
- **Chartered by DMB to verify IT components meet DoDIIS requirements and function within existing infrastructures and resources**



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Test 101: Interoperability

■ **Purpose**

- **Demonstrate satisfactory and direct exchange of data between two or more IT components**
 - no loss of precision
 - format understood by involved IT components
- **Conduct NITF and USMTF standards conformance certifications where needed**

■ **Test Agency**

- **DISA's Joint Interoperability Test Command (JITC), Indian Head MD**
- **Chartered by JCS to issue interoperability certification for IT components**

NITF - *National Imagery Transmission Format*

USMTF - *United States Message Text Format*



Test 101: Security Certification

■ Purpose

- **Comprehensively evaluate the technical & non-technical security features of an IMA and other safeguards to establish the extent to which the IMA meets the specified set of security requirements**

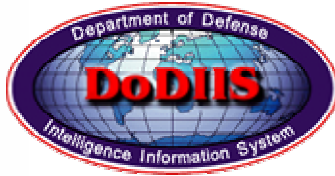
■ Test Agency

- **Appropriate Security Certifying Organization (SCO)**
- **Assigned by DIA with the responsibility to certify most projects (except multi-level, Protection Level 4 systems)**
- **Uses DoDIIS Security Certification and Accreditation Guide (April 2001)**
- **Accreditation authority remains with DIA**

Note: JITF security (INTSEC) test procedures are not related to Security Certification.



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Test 101: Training Certification

■ Purpose

- **Ensure that performance-based training materials have been developed and are in an appropriate and effective format for learning concurrent with the delivery of the IMA for end users**
- **PM should create or build upon existing Training Management Plan and training materials (CBTs, videos, books and manuals).**

■ Test Agency

- **General Intelligence Training Council (GITC) at Defense Intelligence Agency, Washington DC**



Test 101: Operational Site Acceptance

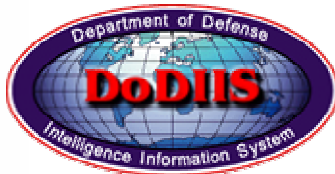
■ **Purpose**

- **Certify IT component interoperability and functionality with other IT components in an OPERATIONAL environment by an operational user**

■ **PMO identifies Beta II test site**

- **An operational DoDIIS site at which IT component will be installed**
- **Use Beta II test site criteria when choosing the site**
- **Beta II site develops operational scenario and writes a test report (in message format)**

See Test and Evaluation Policy, Appendix G, for additional guidance



Prior to Beta I Test

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- **Integration (JITF)**
 - Provide documentation and software when due
- **Interoperability (JITC)**
 - Reviews Documentation (determines the need to test)
 - Develops and publishes test plan
- **Security Certification**
 - Reviews Documentation and Test Procedures
 - Requests that PM perform pre-test (proof read)
- **Training Certification**
 - Reviews Training Management Plan
 - Submit Training materials by start of Beta I
- **Work with Beta II site to develop operational test scenario**



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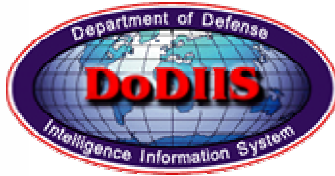
Beta I Testing

Testing Conducted:

- **Integration (JITF)**
 - **Installation, integration and infrastructure compliance**
 - **Issues Test Report with recommendation to Proceed to Beta II**
- **Interoperability (JITC)**
 - **Initial interoperability assessment**
 - **Issues recommendation to Proceed to Beta II**
- **Initial Information Security**
 - **Initial IT component review**
 - **Issues memo with recommendation to Proceed to Beta II**



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Beta II Testing

Testing Conducted:

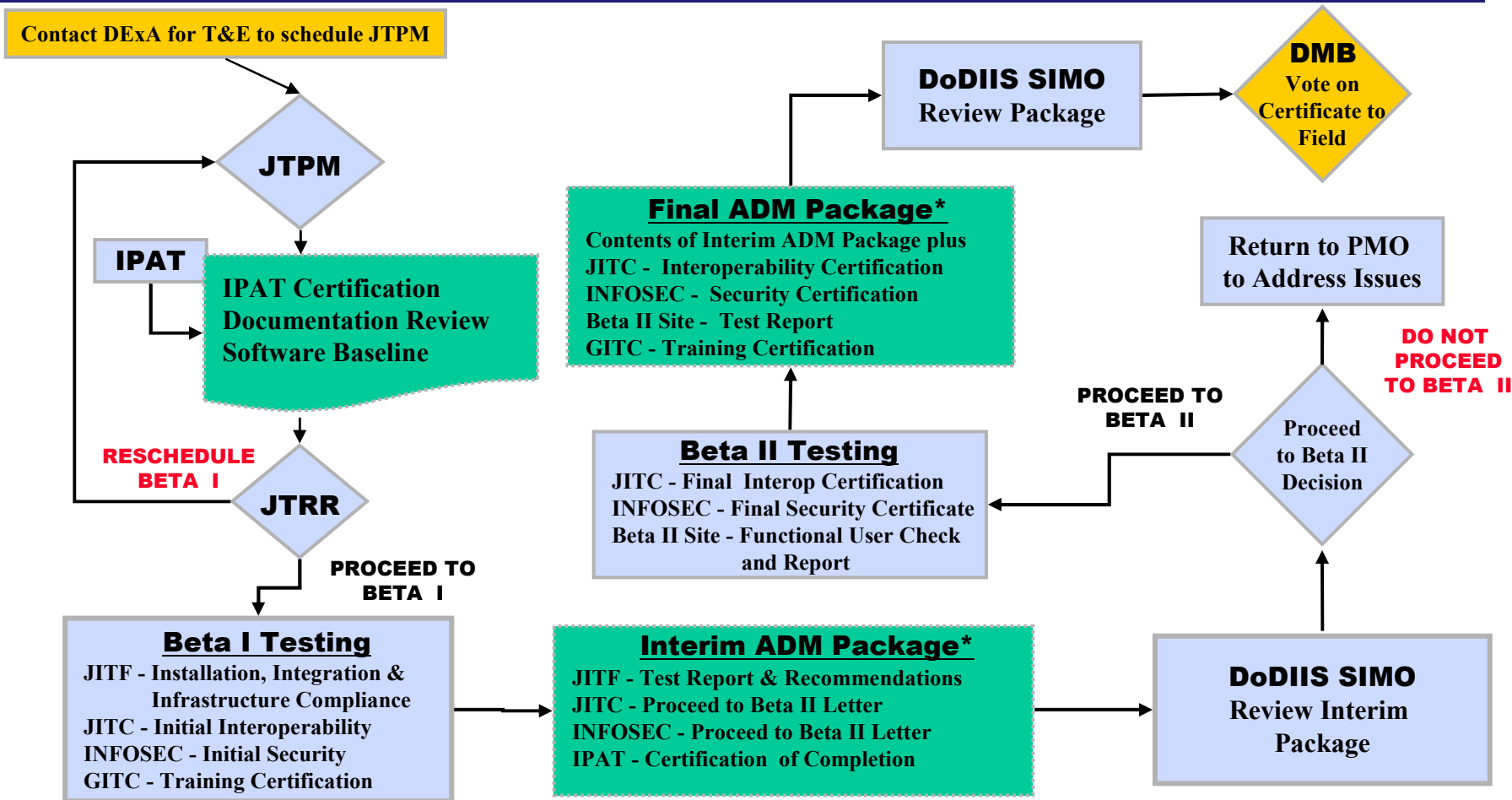
- **Operational Site Acceptance Testing**
 - Site conducts testing with operational scenario
 - Sends Beta II test report (message format) to PMO, DoDIIS SIMO, and DExA for T&E
- **Interoperability (JITC)**
 - Final IT component review
 - Performs tests, publishes test report, issues interoperability certification
- **Information Security**
 - Final assessment and security certification
 - DIA gives accreditation upon review of certification



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DoDIIS Test and Evaluation Process



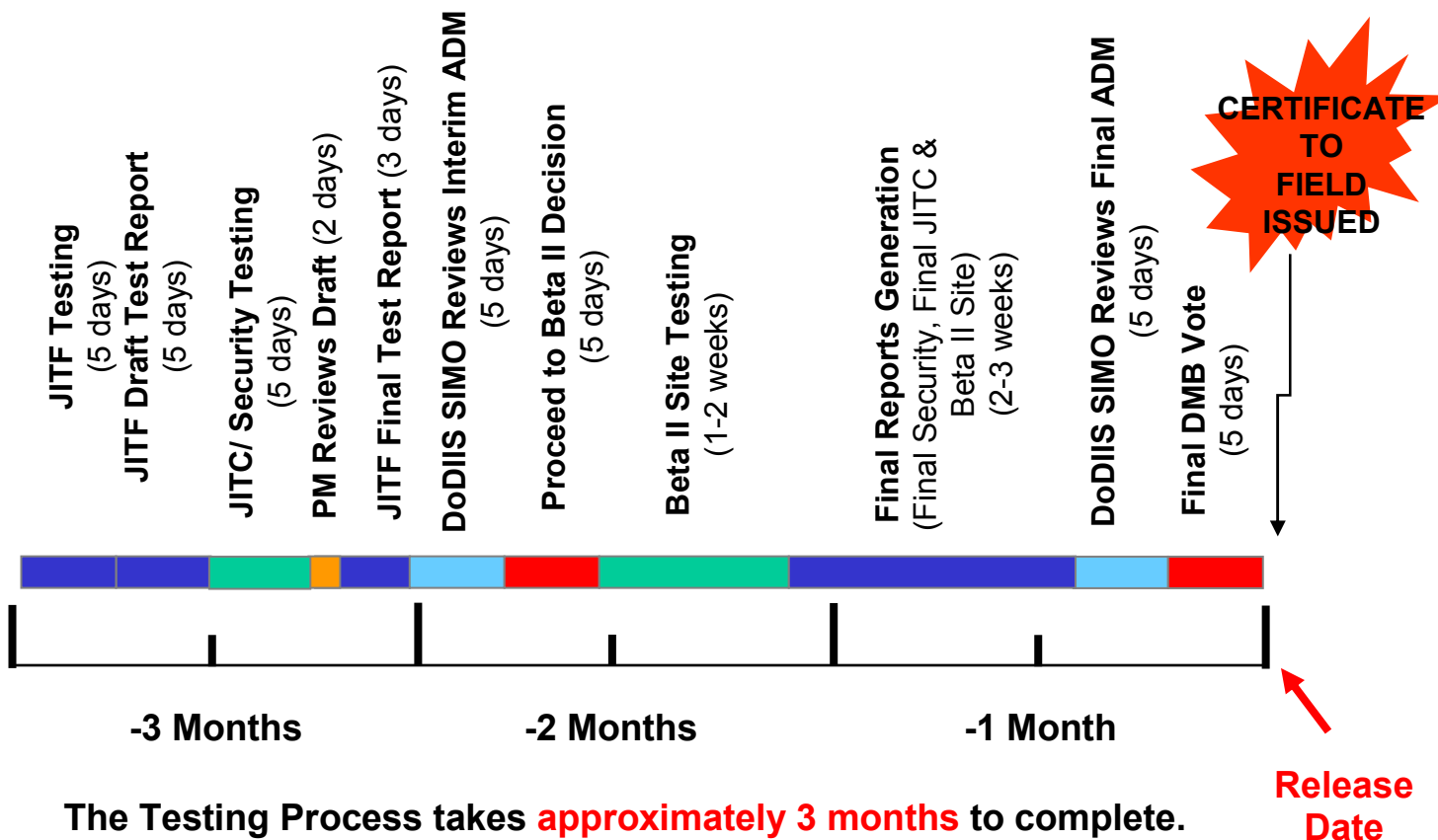
*See DoDIIS Instructions, Appendix C



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Testing Timeline

JTPM
at least 3
months
before
Beta I



The Testing Process takes **approximately 3 months** to complete.
Plan ahead early so that you can release on time.



PMO Responsibilities

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- **Conduct functional testing (FAT / IPAT)**
- **Deliver required documentation to all parties**
 - **JITF, JITC Security Certifiers and Training Certifiers**
- **Select Beta II test site and date soon!**
 - **Provide Beta II site POC to DExA for T&E**
- **Coordinate with Beta II site personnel on operational test scenario**
- **Reconfirm security schedule with the appropriate security office before Beta I / Beta II**
- **Collect required reports/letters for Interim and Final ADM packages**



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Documentation

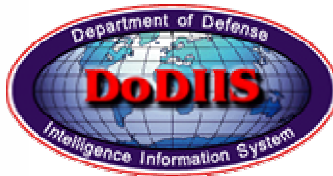
- **Required to Determine Need to Test:**
 - **Version Description Documentation**
 - **Interface Control Document(s)**
- **Before Testing**
 - **JITF - As described in workplan**
 - **JITC - Sufficient documentation to build a Test Plan**
 - **Security Certifiers - see DIA Security Certification and Accreditation Guide**
 - **Training - Training Management Plan & Training Materials**
 - **Beta II Site Personnel - Sufficient material to build the operational test scenario**

NOTE:

**Documentation
not delivered as
scheduled
may result in
postponement
of testing.**



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FY03 Funding Strategy

Current Funding Strategy:

- **In the 1st quarter of the FY, each Service/Agency is to pay \$150K for each program (not each test) requiring DoDIIS test and certification activities, regardless of size or amount of effort needed for the activity**
- **The amount of funding was based on a forecast for fiscal year**
- **Funding is considered a 'premium' to cover all JITF and JITC test activities, to include reviews, testing services, and reporting, as well as the issuance of 'no-test' letters**



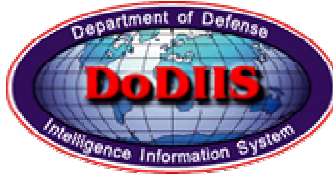
DMB Funding Strategy Proposal

Future Funding Strategy:

- Centralized Funding for DoDIIS Testing
- Funding would come directly from the GDIP budget
- Comments:
 - Allows truly independent testing
 - Frees testers from constant worries about collecting funds annually from services/agencies individually
 - Services/Agencies would be freed from programming for testing and transferring funds during execution year
 - DoDIIS testers could justify their expenses directly with GDIP PM (similar to JWICS setup). PMGM states that through centralized funding "...the JWICS PMO will gain greater flexibility to better manage the JWICS network and related services."
 - Similar to JWICS, DoDIIS testing process would be better able to serve our customers, both Unified Commands and Program Managers.



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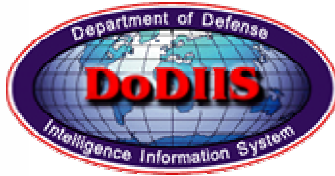
Summary

- **Test Process Overview**
 - **JITF Integration Testing**
 - **JITC Interoperability Testing**
 - **Information Security Certification**
 - **Training Certification**
 - **Beta II Testing**
- **DoDIIS T&E FY03 Funding**

We are what we repeatedly do. Excellence, then, is not an act, but a habit. - Aristotle -



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Questions?

- **DExA for Test and Evaluation**

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Email: dexa.te@langley.af.mil

- **Subscribe to the Virtual Test Folder (VTF) at:**

<http://web1.rome.ic.gov/vtf.cgi>

- **Documentation on JITF Home Page:**

<http://www.rl.af.mil/jitf>



DoDIIS Funding Req'ts for FY03

JITF Labor	\$ 2,783,000
JITF Hardware Replacement	\$ 363,000
JITF CM/Cubic Support	\$ 101,000
JITF Software Licenses	\$ 80,000
JITF Training	\$ 48,000
JITC Labor/Training	\$ 1,100,000
AF Infrastructure Support	\$ 551,000
Total	\$ 5,026,000



T&E Cost Breakdown

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Equipment	\$7,764
Configuration Management	\$3,694
Software Licenses	\$1,206
JITF Contractor Support	\$95, 945
JITF Training Support	\$1,771
JITC Contractor Support	\$33,168
DExA Contractor Support	\$6,257
Government Travel	\$595
Total Cost per Program:	\$150,400

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